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CLAIMS

1. A method for the foaming of glue for the production of wood-based sheets, in which the gluing substance and the gas are brought into contact with 5 one another and the gluing substance is foamed mechanically with the aid of the gas, characterized in that the gluing substance and the gas are mixed into an essentially homogeneous mixture prior to foaming.
2. A method according to claim 1, characterized in that the gluing substance and the gas are mixed by spraying them together as several directed partial flows such that the largest possible contact surface area is produced between the gluing substance and the gas. 10
3. A method according to claim 1 or 2, characterized in that the gluing substance and the gas are sprayed in a circular way such that the gluing substance is fed essentially from the centre and the gas from a ring around the gluing substance feed with the 15 gluing substance and gas sprays being directed such that the gluing substance and the gas are brought into contact with one another. 20
4. A method according to claim 1 or 2, characterized in that the gluing substance and the gas are sprayed in a circular way such that the gas is fed essentially from the centre and the gluing substance from a ring around the gas feed with the gluing substance and gas sprays being directed such that the gluing substance and the gas are brought into contact 25 with one another. 30
5. A method according to one of claims 1 - 4, characterized in that air is used as the gas.
6. A method according to one of claims 1 - 5, characterized in that for the gluing substance a composition is used that contains resin, foaming agent, filling agent and/or hardener. 35

7. A device for foaming glue for the production of wood-based sheets, wherein the device contains a gluing substance and gas nozzle system (1,2,3,4) for the feeding of gluing substance and gas, and a foaming chamber (5) and foaming means (6) for foaming the gluing substance mechanically with the aid of air, and means (9) for removing the foamed gluing substance from the device, characterized in that the device contains a mixing chamber (7), in which are arranged the gluing substance (3) and gas (4) nozzles of the nozzle system, that are directed into the mixing chamber to mix the gas and gluing substance to be fed into an essentially homogenous mixture prior to foaming.

8. A device according to claim 7, characterized in that the nozzle system (1,2,3,4) is arranged to mix by spraying partial flows of gluing substance and gas from many directed gluing substance (3) and gas (4) nozzles in the mixing chamber (7) such that the largest possible contact surface area between the gluing substance and the gas is produced.

9. A device according to claim 7 or 8, characterized in that the nozzles (3,4) are arranged such that the gluing substance nozzles (3) are arranged essentially in the centre and the gas nozzles (4) around the gluing substance nozzles (3) in a circular shape.

10. A device according to claim 7 or 8, characterized in that the nozzles (3,4) are arranged such that the gas nozzles (4) are arranged essentially in the centre and the gluing substance nozzles (3) around the gas nozzles (4) in a circular shape.

11. A device according to claim 7 or 8, characterized in that the nozzles (3,4) are arranged in a matrix construction, in which the gas (4) and gluing substance (3) alternate across the entire feeder surface area (10).

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12. A device according to one of claims 7 - 11, characterized in that the foaming means include rotor plates (6).